CASE STUDY

Steel - Hot Mill:

Over \$11,000 per Year Savings in Operating Costs

QUAKERTEK™ AX 2502-EP

The Challenge

A large steel mill had a Hot Rolling Department that desired to:

- Lower their operating costs in order to increase their competitive advantage in the US steel market
- · Improve steel and product quality
- · Increase output and service
- Reduce overall costs

The Solution

The company they chose was Quaker Houghton due confidence in Quaker Houghton's product, people and performance.

The mill decided to replace the incumbent grease product in all their hot rolling applications with QUAKERTEK $^{\text{TM}}$ AX 2502-EP.

QUAKERTEK™ AX 2502-EP was trialed by the steel mill, and matched all of the technical requirements of their current arease:

- 4 Ball wear
- 4 Ball Scar
- · Base oil viscosity
- Mobility
- NLGI grade
- · Water washout
- Dropping point

The customer is very pleased to have a supplier that understands their total needs through the reduced cost per pound for grease, new capital equipment (bins) and enhanced service.

The Benefits

Since using QUAKERTEK™ AX 2502-EP in their operations, the company has saved over \$11,000 per year plus increased service level and laboratory support at their mill including:

- · New bins brought to customer site
- · Inventory management was implemented
- Trended grease use reported for every Farval System
- Reported any excessive grease use per Farval System
- Monitored the mill operations and reported any unusual observations
- Supervised grease shipments, unloading, bin filling, and storage location

The customer also appreciated the improvement in safety when handling grease bins. Special bins were built to eliminate any bins that we carried overhead by cables.

Process and Equipment

| HOT MILL | |
|-------------|---|
| Operation | 6 Stand Reversing Mill - 3 pass normal walking beam slab Furnace |
| Capacity | 600,000 tons per year |
| Lubrication | Plant-wide use of Aluminum Complex grease |
| Application | 11 Farval Grease Systems – Dual line injectors |



The Product

QUAKERTEK™ AX 2502-EP grease is aluminum complex thickened lubricating grease that has been specifically formulated and manufactured to provide outstanding lubrication in industrial applications where water washout or water spray off is a concern.

QUAKERTEK™ AX 2502-EP grease contains an additive package that provides maximum performance over a broad range of applications. Fortified with extreme pressure additives, QUAKERTEK™ AX 2502-EP:

- Is well suited for use in steel mills and other industries where maximum performance and water resistance are required
- Has higher oil to thickener ratios that make these products more easily handled in centralized lubricating systems even in low temperature applications
- Is a valuable multi-functional, multi-purpose product capable of performing in a wide variety of industries and applications

